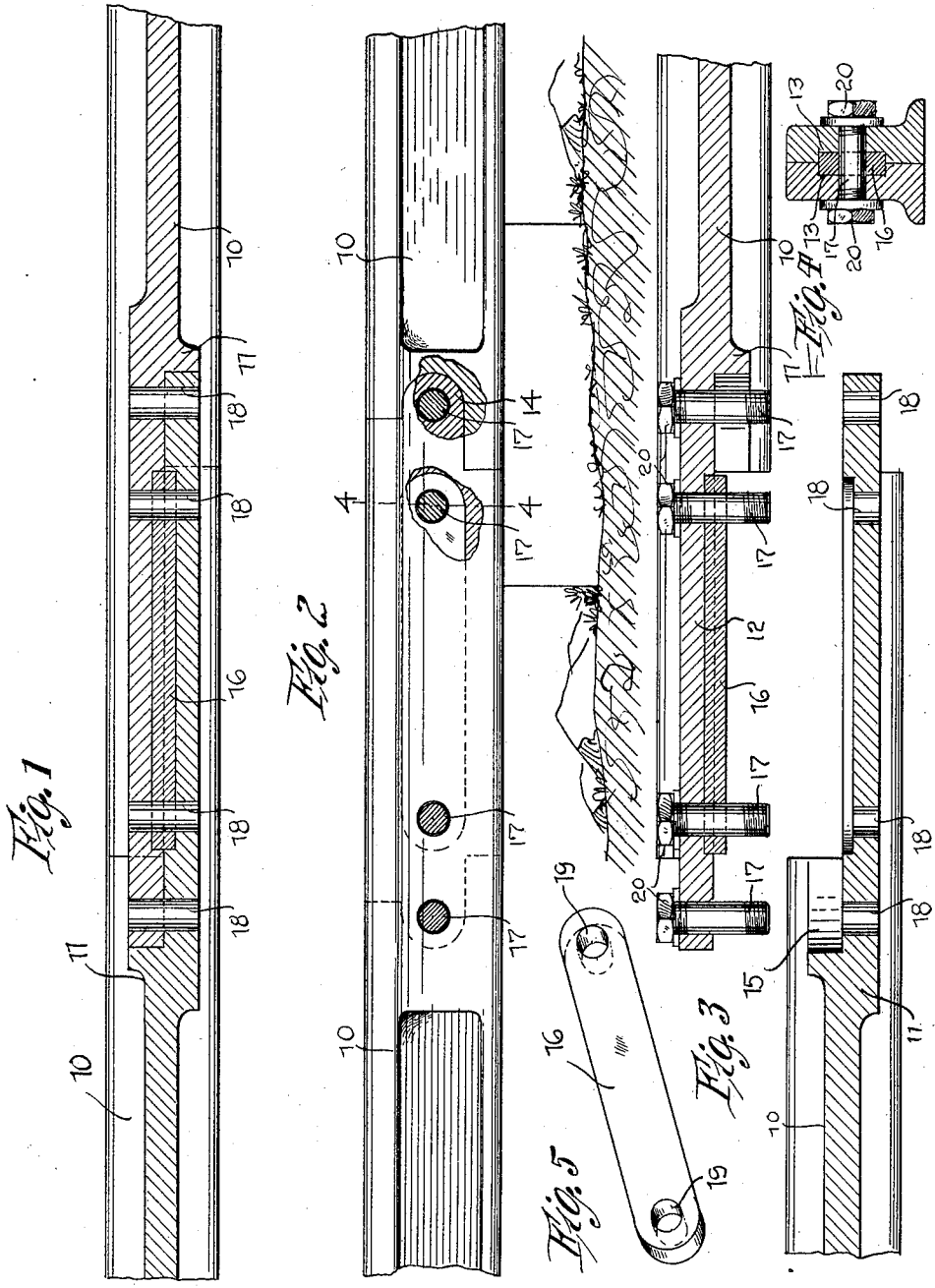


J. KENT.
RAILROAD JOINT.
APPLICATION FILED JUNE 29, 1912.

1,055,919.

Patented Mar. 11, 1913.



WITNESSES
Robert M. Sutphen.
Ross Woodward.

INVENTOR
JOHN KENT
By E. E. Freeman, Attorney.

UNITED STATES PATENT OFFICE.

JOHN KENT, OF HARRISBURG, ILLINOIS.

RAILROAD-JOINT.

1,055,919.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN KENT, citizen of the United States, residing at Harrisburg, in the county of Saline and State of Illinois, have invented certain new and useful Improvements in Railroad-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to railroad joints of the type in which the rails are connected together without the use of fish plates, and the principal object of the invention is to so form the end portions of the rail that they
15 will be interchangeable and will be very securely connected together.

Another object of the invention is to connect the rails together so that all movement will be prevented thereby removing all
20 strain from the bolts, which connect the two rails together.

In the accompanying drawings:—Figure 1 is a longitudinal sectional view through the rail with the bolts removed. Fig. 2 is a
25 side elevation of the rail with portions of the rail broken away to show the interior construction and the bolts shown in section. Fig. 3 is a view somewhat similar to Fig. 1 and showing the rails about to be connected
30 together. Fig. 4 is a sectional view along the line 4—4, of Fig. 2. Fig. 5 is a perspective view of the key which is positioned between the end portions of the rails.

Referring to the accompanying drawings
35 it will be seen that this invention comprises an improvement in rail construction, the rails having their end portions formed so that they will be interchangeable thereby providing a rail which is very easily set up,
40 since it is not necessary to have the rails placed in a certain position in order to connect them.

Each end of each of the rails 10 is thickened as shown at 11 and is then provided
45 with a reduced end portion 12 which is provided with a longitudinally extending seat 13 formed in its inner face. The end portion of the rail is provided with a curved tongue 14, the lower edge of which is longer
50 than the upper edge, as clearly shown in Fig. 2. This causes the tread to be of greater length than the base of the rail and will cause a locking action to prevent movement of the rail as will be hereinafter brought
55 out. A recess 15 is formed in the end portion of the rail to one side of the reduced

end portion and is adapted to receive the tongue 14 of an adjoining rail. It should be noted that the tread at this point of the rail is of less length than the base thus causing
60 the two end portions of the rail to fit tightly together as shown in Fig. 2 with the contacting ends of the base and tread portion of the rail out of alinement. This not only prevents any pivotal movement, but also
65 strengthens the rail against pounding, since the dividing line between the rail does not extend in a straight line through the rail but is intersected by the curve of the tongue 14. A key 16 is placed in the alined seats 13 so
70 that the longitudinal central portion of the rail will be reinforced thus preventing the connected portions of the rail from being weakened. When connecting these rails the bolts 17 are passed through the openings 18
75 of one rail and the key 16 is placed in the seat 13 with the inner bolts passing through the openings 19. The bolts are then passed through the openings 18 in the end of the adjoining rail with the tongues 14 of the rail
80 fitting in the pockets 15. The nuts 20 are then screwed upon the ends of the bolts and the two rails will be securely held together. The key 16 greatly braces the end portions of the rail and takes the strain off of the
85 bolts when a train passes over the rail. The tongues 14 by fitting in the pockets 15 prevent pivotal movement of the two rail sections and also serve to strengthen the end portion of the rails, since they act as locks to
90 prevent vertical movement of the rails when a train passes over them.

Having thus described the invention what is claimed as new, is:—

1. A pair of rails having overlapping end
95 portions, each of said end portions being provided with a longitudinally extending pocket extending into the main portion of the rail and with a longitudinally extending cut-out portion formed in the inner face of
100 the overlapping portion and extending in alinement with said pocket, a tongue extending from the end of said rail and fitting into the pocket of an adjoining rail, a bracing key positioned between the overlapped
105 end portions of said rail and fitting into said cut-out portions, and securing means passing through said rails and through said key.

2. A pair of rails having overlapping end
110 portions, each of said end portions being provided with a pocket extending into the main portion of the rail and with a cut-out

portion formed in the inner face of the overlapping portion, a tongue extending from the end of said rail and fitting into the pocket of the adjoining rail, a bracing key
5 positioned between the overlapped end portions of said rail and fitting into said cut-out portions, and securing means for holding said rails together.

3. A rail having the web thickened adjacent each end, and provided with a pocket extending longitudinally into the thickened end portion to one side of the longitudinal center of the rail, the portion of the tread to one side of the center being removed above
10 the pocket, a tongue extending from the end of the rail and adapted to fit into the pocket of an adjoining rail, and the rail base and web being removed from beneath said tongue

whereby when the rail sections are connected together, the connected portions of the rails
20 will be of the same width throughout their length as the thickened portion of the rail, and the abutting ends of the rails to each side of the longitudinal center will have the contacting edges of the base and tread
25 positioned out of alinement, the tongue forming a locking means intermediate the side of the rail to prevent pivotal movement of the rails.

In testimony whereof I hereunto affix my
30 signature in presence of two witnesses.

JOHN KENT.

Witnesses:

JAMES SULLIVAN,
LUTHER NOLEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."